BUREAU OF ENVIRONMENT

CONFERENCE REPORT

DATE OF CONFERENCES: August 3, 2006

LOCATION OF CONFERENCES: J.O. Morton Building

ATTENDED BY: Jon Evan, Kevin Nyhan, and Charles Hood, NHDOT; D. Scott Osgood, Michelle Juliano, and Robert Smith, Administrative Services; Jim Garvin and Linda Wilson, NHDHR; Harry Kinter, FHWA; Rich Roach, ACOE; Meghan Theriault, Engineer, Town of Goffstown; Joe Luna, Selectman; Bill Gard Barbara Gard, and Ron DiCarlo Heritage Commission, and Bob Pothier, Building Restoration Specialist, Town of Danville; Richard Roberts, architect for Administrative Services; and Peter Thomas, FEMA.

SUBJECT: *Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting*

Thursday, August 3, 2006

FEMA Project – May Flooding. Participants: Peter Thomas, FEMA (peter.Thomas@dhs.gov).

Peter Thomas reviewed the Wiswall bridges over the Lamprey River (069/072 and 070/072) in Durham, which were damaged by the May flooding. J. Garvin had explained that although they date to 1950, they are adjacent to the Wiswall Dam, and could be contributing elements in a National Register eligible district. One of the two spans was replaced in 1976. The 1950 bridge is an I-beam structure with corrugated metal and concrete deck. The later one has a poured concrete slab deck. They are on concrete abutments but are anchored on a stone pier in the center. P. Thomas stated that FEMA would support bringing the bridges to a pre-disaster condition by replacing the two concrete decks. They are also near an archaeological district.

NHDOT had suggested replacing both bridges with a single span and eliminating the center stone pier. Three alternatives showing three different bridge styles were developed. The project is programmed for 2010 Bridge Aid program. The town has considered using the FEMA money to replace the two spans as described and seeking reimbursement later. P. Thomas was not sure which of the two options to do this fix would be selected.

It was agreed that the bridges were not individual eligible, but they might be contributing to the district, particularly the stone pier. NHDHR noted that if the two bridges were replaced, then further review would be needed to determine if there is a district and the fate of the stone pier. This pier has lost some integrity with the undermining of its base.

J. Garvin noted that when the bridges are replaced, it would be important to understand the evolution of the area better. He noted that the area had been a mill site and an ancient crossing. The adjacent falls had been used as a source of waterpower since the 1600s. It once included a dam and sawmill erected about 1835, a later gristmill, and a paper mill by 1853-83, and a hydroelectric generating plant was built after a fire of 1896 and flooding at the mill site.

Dwellings of the era including Thomas Wiswall's remain in the area. J. Garvin requested that the project be conditioned with the stipulation that further historical studies be done if more than the decks are replaced. The current engineers are Hoyle Tanner Associates. If just replacement to pre-flood condition is chosen, then a no historic properties affected memo can be completed. However, even here there may be other archaeological issues.

P. Thomas discussed additional bridges projects. J. Garvin had no concerns with the Salem Stone Culvert project. The Bennett Bridge in Northwood was built as a causeway by 1958. There are no concerns about this property. The Hampton Fire House is not eligible for the National Register, and a no historic properties affect memo can be prepared. The Twin Bridges over the Baboosic Brook in Merrimack are not individually eligible and would be a contributing element in a district only if they are in a park with a designed landscape. The Pillsbury Dam in Webster failed and does not need to be considered since it was built in the 1960s. J. Garvin was uncertain whether there had been a mill site there. It may be an archaeological issue, which would need to be resolved with E. Feighner when she returns.

Elm Street Box Culvert (May Flooding-no project number). Participant: Meghan Theriault, Town Engineer, Goffstown (mtheriault@ci.goffstown.nh.us).

M. Theriault discussed the historic value and possible mitigation for the Elm Street Stone Box Culvert located in Goffstown, New Hampshire. The following is information regarding the current condition of the culvert.

The culvert pipe that carries Richard's Brook across Elm Street is made up of two separate sections joined together, most likely due to the widening of the road at some point. At the inlet side, there is a 5-foot diameter reinforced concrete pipe measuring approximately 16 ft long. The pipe then transitions to the older section, which is a granite box culvert, measuring approximately 29 feet long with dimensions of 2ft-4in wide x 3ft-5in high. This transition causes a choke point within the structure itself. During the flooding, water not only ran down Elm Street but also up and over the road at the location of the RCP pipe/box culvert. To the best of our knowledge, some of the drainpipes beneath the road collapsed causing sinkholes in the road. There is also a retaining wall that runs along the sidewalk at the outlet side of the pipe, the box culvert side. This wall has been significantly damaged due to the flooding. The sidewalk collapsed in several areas also. The town needs to replace the structure.

NHDHR has determined that all stone box culverts are deemed eligible for the National Register of Historic Places. It was concluded that there will be an Adverse Effect on Historic Resources, and therefore the following mitigation is required. One approach would be for the Town of Goffstown to shut down Elm Street for two days. The first day should be shut down for careful demolition while two consultants, hired by the town, record the original structure via photos and sketches or possibly laser scanning. The second day should be shut down for the preparation and installation of the new structure. Documentation would need to include plans, large format photographs, a description, and historical narrative.

The project would be part of an emergency relief project funded by FHWA. J. Garvin and H. Kinter suggested bypassing the existing culvert so that it could be used as an overflow pipe. However, there did not appear to be adequate room for this approach. Thus, documentation as well as an adverse effect memo and MOA will be necessary. [Nancy Mayville is heading up this project, and it has not received a project number. NHDOT needs to coordinate with J. Sikora to

confirm that the project qualifies and can receive funding in comparison to other flood-related needs. (jm)].

Danville: Webster Stage Coach Stop and Store, Route 111A (no project number). Participants: Joe Luna, Selectman; Bill Gard, Vice Chair, Heritage Commission; Barbara Byrne, Heritage Commissioner (owner); and Bob Pothier, Building Restoration Specialist; Ron DiCarlo, Chair, Heritage Commission (selectadmin@townofdanville.com).

Members of the Heritage Commission and the select board have been discussing the relocation of the Webster Stage Coach Stop along NH Route 111A with the NHDOT. The building sits less than 3' from the paved way. The purpose of such a NHDOT betterment project would be to remove a hazard from the right-of-way and ensure the preservation of the building. It was damaged by a passing truck about two years ago, and the runoff from the road is rotting the front sill. Damage from this incident was repaired by Bob Pothier. The Byrnes have offered the building to the town for its relocation.

Its relocation across Route 111A would retain it within the same roadside context. It would be placed within the same lands occupied by Nathaniel Webster, who historically owned the building when it functioned as a stagecoach stop and post office. It was erected ca. 1800-1820 on the Webster homestead. The family ran the business through most of the 1800s. A second section, containing a stable that stood adjacent to the stage stop, was removed to Sturbridge Village in the 1980s. The building is eligible for the State Register and retains considerable interior integrity including its plaster walls with hand written accounts, federal period doors, and original casings, ceiling, and wood fixtures.

The 16' X 32' building would be relocated less than 100' and can be moved without utility work. The town currently owns the proposed parcel. It intends to build a dry-laid foundation to receive the building. It has spoken to Northeast Builders who would perform the work. During this process, the front sill would be replaced.

NHDHR agreed that the building could be moved. Linda Wilson noted that since the building is being maintained in the same context so that it can express its meaning and the move protects the building from damage, the project would not affect its National Register eligibility. J. Garvin noted that the building should be rotated so that it continues to face the road. An archaeological covenant should be placed on the property on which it now stands to protect deposits, which provide information on the building, its associated stable, and their operation. The NHDHR also requested to review and approve of the plans prior to moving.

Monadnock Mill No. 1 (no project number). D. Scott Osgood, Michelle Juliano, and Robert Smith, Administrative Services, and Rich Roberts, Architect.

Scott Osgood noted that he and Rich Roberts had again visited the mill to assess possible alternatives to covering the dry laid foundation with an integral concrete wall. Their concerns remained its exposure to damage and its condition. They had no other alternatives to offer other than reducing the height of the concrete wall so that part of the original foundation would still be visible. It was noted that the wall would be visible on the interior of the basement, but not to the general public.

A section of wall collapsed in 1996. It was confirmed that the crack did not go all the way through the wall, but extends through about 50-60% of the wall. However, stone was prevented from falling into the crack by a concrete plug. J. Garvin asked whether the wall retained its ability to be a load-bearing wall. Such encasement is an adverse effect and is irreversible. The life of the concrete wall would be finite. As an integral part of the foundation, its failure would cause the failure of the whole stone foundation. The existing wall has survived 170 years, considerably longer than the life span of a concrete wall. The real issue is the need for continued maintenance of the existing wall, rather than the construction of this additional wall. It was noted that some repairs had been previously completed along the wall including the addition of turnbuckles. The Bureau of Public Works added them just prior to the building's rehabilitation 20 years ago. Jim Garvin reiterated the importance of looking at and costing alternatives including adding support form the interior and rehabilitating the wall as a dry laid stone wall.

It was concluded that the work would not be conducted this season and that it would need to comply with codes and available finances.

J. Garvin suggested looking at the kinds of techniques that have been used in the rehabilitation of dry laid stone foundations under the Amoskeag Mill buildings that line the Merrimack. It was noted that the foundation is a load-bearing wall and that the floors are supported on piers along the interior of the building. Would it be possible to reinforce / brace these areas. Rich Roach noted that the locations where the stresses were expressing themselves remained unidentified. J. Garvin also stated that mason working with dry laid stone were able to repair such walls to function as they had in the past. An important consideration remained the ability of the wall to self-drain and dissipate internal stresses during flooding. He realized that modern engineers were not able to put faith in this type of repair because its strength could not be quantified. The proper treatment remains the repair of the wall as a dry masonry structure. Additional strength could be gained by tying the wall to an internal frame. This approach would also protect the view from the adjacent park. Adding a series of exterior buttresses was discussed briefly, but it was concluded that they would interrupt the flow of the river.

It was reiterated that there was concern about the cracking along the wall, which would evidence internal stresses and the potential for seismic movement was also noted. However, if this project is classified as a repair, this later issue should not become a problem. J. Garvin stated that this concern over movement was why he had originally requested crack monitoring to discover where the stresses were and whether the cracks continued to be active. Often, a rubble stone wall is capable of equalizing its stresses. J. Garvin and L. Wilson stated that there is not enough information to conclude that this is the only alternative, and the costs of other alternatives have not been determined. L. Wilson reaffirmed that crack monitoring was feasible and would provide useful information about stresses. It was suggested that Administrative Services receive a second opinion concerning a traditional repair. John Wasterman was suggested for this work. R. Roach agreed that it made sense to hire a stone mason who could understand the movement of the wall rather than place a cap on the building's lifespan by using concrete. It was suggested that a query into repair techniques be posted on the web. Administrative Services agreed to continue to examine alternatives and the better define the condition of the wall.

Moultonborough, X-A000(354), 14414. Participants: J. McKay and Charles Hood Presented for Jay Poulin, HE Bergeron Engineers (jpoulin@hebcivil.com).

Photographs and plans had been submitted for review of the cultural resources along the project area by Jay Poulin. The project involves the construction of a 4' shoulder along Moultonborough Neck Road for 12,000' between Highway Garage Road and Kona Farm Road. The photographs focused primarily on the shoulder of the existing road. While historic buildings were noted along the shoulder, it was determined that the project would not affect them. The project is within the right-of-way. However, it was noted that there are several historic buildings, which lie immediately adjacent to the right-of-way. If the project were widened outside of the right-of-way adjacent to these buildings, then the effects of the project at these locations would require review. A no adverse effect memo can be prepared and signed for placement in the document.

Hinsdale, X-A000(426), 14540N: Participant: Jon Evans.

This project is a bypass of a collapsed section of NH Route 63 in the Town of Hinsdale, NH. Jon Evans reminded Harry Kinter that this project would have an adverse effect on the Smith (Jeffords) property, which is eligible for the National Register as a contributing element to the Chesterfield Road Historic District. J. Evans also indicated that consultation with the Advisory Council was necessary and asked H. Kinter what information he needed to begin this process. He indicated that normally a document would be preferable, but since we do not have one ready at this point, anything we had would be helpful. He requested a project description, alternatives, and any additional information, which had been developed to date. Jon agreed to get this information to Harry as soon as possible.

Alstead, X-A000(472), 14541I and X-A000 (473), 14541J. Participant: Kevin Nyhan.

Kevin Nyhan discussed this project, which involves upgrading a portion of flood-damaged NH Route 123 in Alstead between NH 12A intersection and NH Route 123A intersection. The 14541I project will place fill in the floodplain in a location where houses once stood in preparation for the 14541J project. There was no concern for archaeology at these locations. The entire project area was reviewed with focus on two areas: the location adjacent to and east of the temporary one-way traffic signal and an area west of the intersection of 123 and 123A near the former brick mill. Although there are several eligible and potentially eligible resources along this project corridor, there will be no substantial impacts to them. If the scope were to remain the same, the project would have no adverse effect to historic resources and there would be no 4(f) involvement. A future review will occur once the scope is finalized and drainage has been finalized and a memo will be signed at that time.

****Memos:** Moultonborough, X-A000(354), 14414; Loudon-Chichester Rd.

Submitted by Joyce McKay, Cultural Resources Manager

c.c.	K. Cota	N. Mayville	Bill Cass
	C. Barleon, OSP	C. Waszczuk	D. Lyford
	V. Chase	R. Roach, ACOE	H. Kinter, FHWA